

In the Claims

The following listing of the claims replaces all previous listings.

1.-11. (Canceled)

12. (Currently Amended) A gas fireplace comprising:


a combustion chamber enclosure defining a combustion chamber;

a burner assembly disposed within the fireplace, wherein the burner assembly includes:

a burner disposed to combust a combustible gas and air mixture within the combustion chamber, wherein the burner defines a burner tube aperture,

a burner tube coupled to the burner tube aperture, and

an air shutter coupled to the burner tube, wherein the air shutter defines an air aperture configured to deliver secondary air to the combustible gas and air mixture, and a mixture fitting aperture; and

 a mixture fitting defining a gas passage, and an air orifice extending from a first end at an outer surface of the mixture fitting to a second end at the gas passage, wherein combustible gas is delivered through the gas passage and mixed with primary air entering the gas passage through the air orifice to form the combustible gas and air mixture, and wherein the mixture fitting is configured to deliver the combustible gas and air mixture to the burner through the burner tube, wherein the air orifice is oriented at an angle in a direction of a flow of the combustible gas within the gas passage such that the first end is positioned upstream of the flow of the combustible gas with respect to the second end of the air orifice, and wherein at least a portion of the mixture fitting is inserted into the mixture fitting aperture of the air shutter.

13.-15. (Canceled)

16. (Currently Amended) A method for the mixing of combustible gas and air, the method comprising the steps of:

providing a combustible gas source; and

providing an air shutter to receive the combustible gas and air mixture;

providing a mixture fitting that defines a gas passage and an air orifice extending from a first end at an outer surface of the mixture fitting to a second end at the gas passage, wherein the air orifice is oriented at an angle in a direction of a normal flow of the combustible gas such that the first end is positioned upstream of the flow of the combustible gas with respect to the second end of the air orifice, and wherein the combustible gas source delivers combustible gas to the gas passage and wherein the air orifice provides primary air to the gas passage for mixture with the combustible gas; and

placing the mixture fitting in the air shutter.

Q2 17.-20. (Canceled)